AMENDMENTS TO THE CLAIMS

The following is a complete, marked up listing of revised claims with a status identifier in parentheses, underlined text indicating insertions, and strikethrough and/or double-bracketed text indicating deletions.

LISTING OF CLAIMS

1. (Currently Amended) A computer-readable recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another; and

a navigation area storing a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one second navigation unit referencing more than one map~~third navigation unit~~, each map ~~third navigation unit~~ associated with a different one of the multiple reproduction paths and indicating a separate file of video data in the data area to reproduce.

2. (Original)   The recording medium of claim 1, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

3. (Original)   The recording medium of claim 2, wherein each data block represents at least an intra-coded picture of video data.

4. (Original)   The recording medium of claim 3, wherein each data block represents at least one group of pictures (GOP).

5. - 8. (Cancelled)

9. (Previously Presented) The recording medium of claim 1, wherein the at least one second navigation unit includes a multiple reproduction path indicator indicating that the at least one second navigation unit provides navigation information for multiple reproduction paths.

10. (Cancelled)

11. (Currently Amended) A computer-readable recording medium having a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

a data area storing a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another; and

a navigation area including a first navigation unit including one or more second navigation units, the second navigation unit providing navigation information for reproducing each of the multiple reproduction paths, and including a multiple reproduction path indicator

indicating that the second navigation unit provides navigation information for multiple

reproduction paths, and referencing more than one map, each map associated with a different one

of the multiple reproduction paths.

12. – 13. (Cancelled)

14. (Original) The recording medium of claim 1, wherein each reproduction path represents a

digital channel.

15. (Original) The recording medium of claim 1, wherein each reproduction path represents a

sub-channel of an RF channel.

16. (Currently Amended) A method of recording a data structure for managing reproduction of

at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data on the recording medium, the transport

stream being divided into transport packets, each of the transport packets associated with one of

the multiple reproduction paths, and the transport packets of each reproduction path being

interleaved with one another; and

recording a first navigation unit on the recording medium, the first navigation unit

including one or more second navigation units and controlling a reproduction order of the second

navigation units, at least one of the second navigation units referencing more than one map~~third~~

~~navigation unit~~, each map ~~third navigation unit~~ associated with a different one of the multiple

reproduction paths and indicating a separate file of video data to reproduce.

17. (Currently Amended) A method of reproducing a data structure for managing reproduction duration of at least video data representing multiple reproduction paths, comprising:

reading a first navigation unit from the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one map~~third navigation unit~~, each map associated with a different one of the multiple reproduction paths and ~~third navigation unit~~ indicating a separate file of video data to reproduce; and

reproducing a transport stream of at least video data from the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another.

18. (Currently Amended) An apparatus for recording a data structure for managing reproduction duration at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical recording device to record data on the recording medium;

a controller for controlling the driver to record a transport stream of at least video data on the recording medium, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another, and the controller configured to control the driver to record a first navigation unit on the recording medium, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one map~~third navigation unit~~, each map associated with a different one of

the multiple reproduction paths and ~~third navigation unit~~ indicating a separate file of video data

to reproduce.

19. (Currently Amended) An apparatus for reproducing a data structure for managing

reproduction duration of at least video data representing multiple reproduction paths, comprising:

a driver for driving an optical reproducing device to reproduce data recorded on the

recording medium;

a controller for controlling the driver to reproduce a transport stream of at least video data

from the recording medium, the transport stream being divided into transport packets, each of the

transport packets associated with one of the multiple reproduction paths, and the transport

packets of each reproduction path being interleaved with one another and the controller

configured to control the driver to reproduce a first navigation unit on the recording medium, the

first navigation unit including one or more second navigation units and controlling a

reproduction order of the second navigation units, at least one of the second navigation units

referencing more than one <u>map</u>~~third navigation unit~~, each <u>map associated with a different one of</u>

<u>the multiple reproduction paths and</u> ~~third navigation unit~~ indicating a separate file of video data

to reproduce.

20. (Currently Amended) The recording medium of claim 1, wherein <u>maps</u> ~~the third navigation~~

~~units~~ associated with the at least one of the second navigation units are each associated with a

different one of the multiple reproduction paths.

21. (Currently Amended) The recording medium of claim 20, wherein a number of the maps ~~third navigation units~~ associated with the at least one of the second navigation units is equal to a number of the multiple reproduction paths.

22. (Previously Presented) The recording medium of claim 21, wherein the at least one of the second navigation units includes a field indicating whether the at least one of the second navigation units provides navigation information for multiple reproduction paths.

23. (Currently Amended) A method of creating a data structure for managing reproduction of at least video data representing multiple reproduction paths, comprising:

recording a transport stream of at least video data, the transport stream being divided into transport packets, each of the transport packets associated with one of the multiple reproduction paths, and the transport packets of each reproduction path being interleaved with one another; and

recording a first navigation unit, the first navigation unit including one or more second navigation units and controlling a reproduction order of the second navigation units, at least one of the second navigation units referencing more than one map~~third navigation unit~~, each map ~~third navigation unit~~ associated with a different one of the multiple reproduction paths and indicating a separate file of video data to reproduce.

24. (Previously Presented) The recording medium of claim 11, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

25. (Previously Presented) The recording medium of claim 24, wherein each data block represents at least an intra-coded picture of video data.

26. (Previously Presented) The recording medium of claim 11, wherein each reproduction path represents one of a digital channel and a sub-channel of an RF channel.

27. (Previously Presented) The method of claim 16, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

28. (Previously Presented) The method of claim 27, wherein each data block represents at least an intra-coded picture of video data.

29. (Previously Presented) The method of claim 16, wherein each reproduction path represents one of a digital channel and a sub-channel of an RF channel.

30. (Previously Presented) The method of claim 17, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

31. (Previously Presented) The method of claim 30, wherein each data block represents at least an intra-coded picture of video data.

32. (Previously Presented) The method of claim 17, wherein each reproduction path represents one

of a digital channel and a sub-channel of an RF channel.

33. (Previously Presented) The apparatus of claim 18, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

34. (Previously Presented) The apparatus of claim 33, wherein each data block represents at least an intra-coded picture of video data.

35. (Previously Presented) The apparatus of claim 18, wherein each reproduction path represents one of a digital channel and a sub-channel of an RF channel.

36. (Previously Presented) The apparatus of claim 19, wherein the transport packets associated with each reproduction path are grouped into data blocks, and the transport packets of each reproduction path are interleaved with one another on a data block by data block basis.

37. (Previously Presented) The apparatus of claim 36, wherein each data block represents at least an intra-coded picture of video data.

38. (Previously Presented) The apparatus of claim 19, wherein each reproduction path represents one of a digital channel and a sub-channel of an RF channel.